

## ABSTRACT

It is an object of the present invention to provide a probe that may correspond to various styles of measurement when used in microscopes and that is also applicable to recording devices and an optical head using the same, as well as to provide a method for manufacturing such a probe in a simple and costless manner; for achieving such objects, the method for manufacturing a multiple optical path array type probe according to the present invention is arranged in that in a light guiding material including a substrate that functions as a clad and a light guiding path formed of a component that functions as a core for guiding light or as a waveguide, the light guiding material includes a plurality of light guiding paths aligned to be parallel to each other within the substrate that functions as a clad, and tip end portions of the light guiding paths are sharpened through chemical etching of an end surface that is orthogonal to the plurality of light guiding paths.

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